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BONDS AS ADDITIONAL BANKING RESERVE.[1]

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Beginnings of Bond Buying

Twenty years ago the loanable funds of interior banks were used almost wholly in discounting business and accommodation paper, for local customers. The loans available for this purpose varied in different localities, but after setting aside a slim cash reserve and discounting all the good paper offered, the banker rarely had a surplus and quite frequently the supply of funds was insufficient. By reason of this scarcity of money, high rates were asked and willingly paid.

From year to year, however, wealth increased in the community, deposits grew larger, interest rates declined and at certain seasons of the year, the country banker finding his money accumulating and the demand falling off, began to apply to his New York correspondent for commercial paper offered by large concerns in the metropolis. With the coming of the trust era and its consequent combination of many smaller enterprises, home manufacturing plants were merged into great corporations with sufficient capital, and ceased to be borrowers at the local bank. The accumulating surplus of unemployed funds, thus further enlarged, called for new channels or sluggish dollars would not pay for their keeping. Wealth was increasing steadily and deposits growing correspondingly. To join in some of the underwritings was one way of providing outlet, but this never became a very successful method outside of the great money centers. The best of the underwritings were monopolized by the larger capitalists there, and one or two finger burnings with the poorer ones cured the desire of the country banker for further experiment in that direction. There were, of course, mortgage loans of varying degrees of desirability, but the amount of these became inadequate in proportion as different sec-

[1]Much of this paper is taken, with the consent of J. S. Bache & Co., from a publications of theirs, entitled "Bonds as a Safety Reserve for Banks," written by William C. Cornwell.

tions developed, although they are still available in the agricultural states. Commercial paper had become somewhat unpopular through many losses in 1893.

The expedient of investing idle funds in some of the higher grade bonds was gradually forced to the attention of interior bankers, and while the returns were small compared with the old-time interest rates, yet the stable and satisfactory character of such investments, the availability of the bonds under pressure, and their steady interest-yielding quality, made this plan of caring for a proportion of the assets of a bank more and more a favorite one.

Inception of Reserve Idea

Another consideration, beside that of investing idle funds, had been occupying the attention of bankers for some years. The recurrence of panics, large and small, had put to test, at intervals, the stability of banking institutions. Either by his own experience or by that of others, there had been forced upon the attention of the interior banker, the problem of strengthening his resources, so that his position, fully fortified in ordinary and prosperous times by the usual cash reserve, would not be jeopardized when clouds gathered on the financial horizon and stormy weather threatened or prevailed. To keep on hand at all times a cash reserve of sufficient proportions to insure safety in any emergency would mean to hold idle 50 per cent of deposits with consequent loss to stockholders. The high-class listed railroad bond, safe, yielding steady returns, quickly convertible into cash or available as collateral at lowest charge for interest, seemed to furnish ideal material for a second reserve as well as employment for surplus funds. Tried in a limited way at first, and gradually increasing in favor, the usage has become widespread, of maintaining a reserve in high-class bonds in addition to the regular cash reserve.

Investment by Trust Companies

While this evolution in character and operation of investment was going on among banks of deposit and discount, there was a parallel movement in trust companies, carried farther and of different origin. Beginning in 1897 and extending to the present time, an enormous growth took place in these institutions. During this period deposits in trust companies increased from six hundred

millions to twenty-two hundred millions. These great and constantly accumulating funds, shut out in a degree from the ordinary commercial field, demanded some safe and profitable channel of employment. This was first supplied by loans on real estate, but these, while safe, were found to be stiff and unyielding when cash was wanted. Only a portion of assets could be so invested, because deposits fluctuated and something was needed which, while safe and profitable, could also be readily converted into cash. The trust companies then gradually became aware, as had the banks of discount, and perhaps before these latter, that the three requisites were completely combined in high-grade railroad bonds. Further, too, because of the quick convertibilty of bonds, it became necessary to carry only a small cash reserve, and profits were thus correspondingly increased. In this way trust companies began the investment of a part of their cash reserve and a large proportion of their assets in high-grade investment securities absolutely safe, reasonably profitable, and quickly marketable for cash.

Inquiry Concerning Bond Holdings of Banks and Trust Companies

The reports of banks and trust companies for the last dozen years or more make it quite evident that a gradual investment has been made in bonds other than government bonds, and that the investment has been growing larger each year; at least, until about a year ago, when bonds from extraneous causes began to decline in value. There has heretofore, however, been no way of making an accurate or even fairly accurate estimate of the extent to which bank funds were so invested or of the classes of bonds so held. The reports of national banks to the comptroller of the currency do not furnish these statistics because the head under which bonds other than United States bonds are reported to the comptroller (owing to a retention of an obsolete classification) reads: "Bonds, securities, judgments, claims," etc. The reports of state banks and savings banks to their respective commissioners furnish information only in a few states and territories, and the reports of trust companies, while much more definite in this respect, are incomplete in many states.

Nevertheless, from such statistics as have appeared it is apparent that this investment in bonds has been proceeding in growing

volume for several years and that it has attained at the present time remarkable proportions. It is, therefore, gratifying to be able to record, with many particulars, and with substantial accuracy, the extent to which this investment in bonds has developed. This has been made possible by the investigation made by the banking house of J. S. Bache & Co., New York, and conducted by the author. A letter of inquiry was sent to seven thousand banks and trust companies in the United States, the list including every institution of $50,000 capital and over.

The inquiries in this letter pertained to the kinds and amounts of bonds carried, and to the opinions of the banker regarding the advisability of keeping a reserve in high-class bonds and the proportion of deposits which should be so employed. An opinion was also requested as to the character of bonds considered best for this purpose and as to the advisability, in the vicinity, of dealing in bonds with private investors. Nearly four thousand banks sent in answers, many replying in detail as to exact kinds and amounts of bonds, and expressing opinions and conclusions founded upon years of experience in their respective localities. Expressions of opinion, honestly given by intelligent business men as to undertakings in which they are engaged, are always of great value to those in the same line of operations. When the inquiry is widely made and the response received in statistics and in opinions, as full and as pertinent as in this instance, the published result, while it cannot fail greatly to interest, is of much more than ordinary benefit to the great army of earnest and thoughtful men, who conduct the banking operations of the United States.

Tables have been prepared from these statistics (received from nearly 4,000 out of about 7,000 banks addressed), and from statistics of deposits in national and state banks and trust companies, for the entire country.

Table A shows the total deposits in each state, and an estimated total of bond holdings, obtained by applying to the total deposits the ratio which the reported bond holdings bear to the deposits of banks reporting. By aggregating the results for all the states, the total bond holdings throughout the United States are arrived at with substantial accuracy, as well as the ratio which such holdings bear to total deposits.

TABLE A.

DEPOSITS AND ESTIMATED BOND HOLDINGS OF NATIONAL AND STATE BANKS AND TRUST COMPANIES IN THE UNITED STATES (DOES NOT INCLUDE PRIVATE BANKS AND MUTUAL SAVINGS BANKS).

STATE.	Total Deposits (excluding U. S. deposits).	Estimated Total Bond Investment (excluding U. S. Bonds).	Ratio of Estimated Bond Investments to Deposits. Per cent.
Maine	$50,391,000	$18,256,000	36.23
New Hampshire	18,782,000	4,031,000	21.46
Vermont	28,596,000	7,099,000	24.83
Massachusetts	150,595,000	25,586,000	16.99
Boston	357,174,000	51,290,000	14.50
Rhode Island	123,081,000	43,324,000	35.20
Connecticut	81,293,000	23,601,000	29.03
New England States	$809,912,000	$173,187,000	21.38
New York	$603,908,000	$140,631,000	23.29
New York City	2,501,896,000	335,504,000	13.41
New Jersey	257,627,000	111,805,000	43.40
Pennsylvania	715,860,000	203,161,000	28.38
Philadelphia	534,059,000	116,117,000	32.51
Delaware	16,175,000	6,411,000	39.64
Maryland	114,186,000	41,595,000	36.43
District of Columbia	46,250,000	5,368,000	11.61
Eastern States	$4,789,961,000	$960,592,000	20.05
Virginia	$90,135,000	$5,781,000	6.41
West Virginia	69,138,000	3,655,000	5.29
North Carolina	41,016,000	324,000	.79
South Carolina	33,128,000	222,000	.67
Georgia	61,503,000	911,000	1.48
Florida	24,477,000	656,000	2.68
Alabama	26,268,000	774,000	2.95
Mississippi	40,125,000	2,284,000	5.69
Louisiana	92,762,000	3,232,000	3.48
Texas	117,725,000	1,732,000	1.47
Arkansas	22,337,000	1,892,000	8.47
Kentucky	111,134,000	8,870,000	7.98
Tennessee	88,647,000	12,021,000	13.56
Southern States	$818,395,000	$42,354,000	5.18

STATE.	Total Deposits (excluding U. S. deposits).	Estimated Total Bond Investment (excluding U. S. Bonds).	Ratio of Estimated Bond Investments to Deposits. Per cent.
Ohio	$510,436,000	$94,545,000	18.52
Indiana	167,922,000	38,143,000	22.71
Illinois	252,921,000	42,794,000	16.92
Chicago	611,272,000	103,427,000	16.92
Michigan	258,466,000	37,261,000	14.41
Wisconsin	179,092,000	39,254,000	21.92
Minnesota	163,492,000	19,459,000	11.90
Iowa	242,012,000	7,856,000	3.25
Missouri	217,157,000	41,696,000	19.20
St. Louis	262,525,000	35,277,000	13.44
Middle Western States	$2,865,295,000	$459,712,000	16.04
North Dakota	$28,471,000	$209,000	.73
South Dakota	29,614,000	598,000	2.02
Nebraska	129,046,000	2,748,000	2.13
Kansas	111,311,000	6,585,000	5.92
Montana	34,790,000	2,128,000	6.12
Wyoming	8,580,000	133,000	1.55
Colorado	105,309,000	14,484,000	13.75
New Mexico	10,221,000	40,000	.39
Oklahoma	23,114,000	2,120,000	9.17
Indian Territory	14,279,000	166,000	1.16
Western States	$494,735,000	$29,211,000	5.90
Washington	$66,324,000	$3,113,000	4.69
Oregon	34,126,000	8,323,000	24.39
California	520,662,000	90,664,000	17.41
Idaho	10,032,000	498,000	4.96
Utah	35,313,000	3,417,000	9.68
Nevada	4,103,000	No report.	
Arizona	9,964,000	611,000	6.13
Pacific States	$680,524,000	$106,626,000	15.66
Total United States	$10,458,822,000	$1,771,682,000	16.94

From these tables it appears that the New England national and state banks and trust companies lead in the proportion of deposits invested in bonds, with a percentage of 21.38, while the Southern

States are lowest, with a percentage of 5.18. It will be noted at once, as a general rule governing such investment, that the more fully developed states, and those which have acquired their wealth and standing through the manufacturing industries, are above the average in respect to bond investment, while the agricultural states, particularly those which are in the developing stage, are below the average.

The bankers of New Jersey lead the United States in percentage of deposits invested in bonds other than government securities. The New Jersey banks have 43.40 per cent of their deposits in bonds. This is probably due in large part to the fact that the savings bank law of the state, approved in April, 1897, is liberal. Such legislation, while not bearing directly on the subject of investment for banks and trust companies, has in all states an influence on such bank and trust company investments. Probably another reason why the bankers of this state invest so largely in bonds is to be found in the fact that the farm mortgages of New Jersey are lighter in proportion to value than in almost any other state. The sweeping law of 1893, which exempted from taxation all the municipal securities of the state, without exception, added another very valid reason for such investment.

New Mexico brings up the rear in respect to bond investment. The banking industry in that state is an infant industry, comparatively speaking. The banks were created for the financing of the local undertakings of a country barely entering upon the development stage. Under such conditions, it is both natural and right that the local resources of the country should be the security upon which the deposits are loaned. The same remark applies to the Dakotas and several other states which run low in investments.

The showing of the South in respect to investments is somewhat of a surprise. With the exception of Tennessee, not one of these states appears to have developed any strong tendency toward the use of funds in this way. This is largely explained, on broad grounds, by the fact that the South has needed its local funds in the past few years to keep pace with the rapid development that has gone on in agriculture and in manufacturing. It may be noted that the development of the country has used and is still using an immense proportion of the deposits in farm loans. The investment laws of the Southern States as a whole have by no means reached

the same degree of perfection that has been reached in the older states of the east.

The comparatively small holdings of bonds in the great reserve cities is accounted for by the fact that central reserve city banks, from whom the smaller institutions accept accommodation in stringent times, prefer to keep their funds otherwise employed, because, when called upon by their correspondents, they might be unable to convert bonds promptly into cash, by reason of the heavy simultaneous offerings thus brought about. The smaller bank can always obtain loans on its bonds at the reserve centers and at lower rates, on account of the high character of the collateral, than would be accorded on rediscount of commercial paper.

Table B—Classes of Bonds

Table B shows the classes of bonds in each state, divided into railroads, municipals and miscellaneous.

Probably the most interesting details of the replies from the banking point of view are to be found in this classified list of investments. Because Washington, Oregon and California run to railway bonds very strongly, the Pacific coast states lead the Union in proportion of investments placed in the railroad bonds. The Eastern and New England States are not far behind.

So far as a general rule may be laid down governing the subdivision of the investments, the rule appears to be that the states which for the past eight years have been the scene of the great boom in railroad building have not been the heavy investors in railroad bonds. The center of railroad bond buying appears to be located in Connecticut. The great ratio of the railroad bonds to total investments in Washington, Oregon and California seems to be due largely to the lack of municipal bonds.

The bankers of Connecticut are naturally very heavy buyers of railway bonds, because the legislature of that state has for years been educating them in the buying of railway bonds. The influence noted above of the savings bank law on the investment by other banks, is here again strongly exemplified. The savings bank laws of Connecticut, as compared with those of New York or Massachusetts, are extremely liberal. The bankers of the State of Connecticut are at all times in close touch with the Boston and New York bond markets. They have learned the science of bond-buying

TABLE B.

CLASSES OF BONDS HELD BY NATIONAL AND STATE BANKS AND TRUST COMPANIES IN THE UNITED STATES (GOVERNMENT BONDS ARE NOT INCLUDED).

STATES.	Total Estimated Bond Investment.	CLASS OF BONDS HELD. Railroad. Amount.	Railroad. Per-cent-age.	Municipal Amount.	Municipal Per-cent-age.	Miscellaneous. Amount.	Miscellaneous. Per-Cent-age.
Maine	$18,256,000	$11,311,000	45.65	1,774,000	44.01	417,000	10.34
New Hampshire	4,031,000	1,840,000	61.96	$3,201,000	17.53	$3,744,000	20.51
Vermont	7,099,000	158,000	2.23	6,187,000	87.15	754,000	10.62
Massachusetts	25,586,000	16,660,000	65.11	5,169,000	20.20	3,757,000	14.69
Boston	51,290,000	12,848.000	25.05	22,101,000	43.09	16,341,000	31.86
Rhode Island	43,324,000	30,419,000	70.21	6,827,000	15.76	6,078,000	14.03
Connecticut	23,601,000	21,024,000	89.08	838,000	3.55	1,739,000	7.37
New England States	$173,187,000	$94,260,000	54.43	$46,097,000	26.62	$32,830,000	18.95
New York	$140,631,000	$88,497,000	62.93	$28,928,000	20.57	$23,206,000	16.50
New York City	335,504,000	206,345,000	61.50	81,348,000	24.25	47,811,000	14.25
New Jersey	111,805,000	44,857,000	40.12	44,702,000	39.98	22,246,000	19.90
Pennsylvania	203,161,000	135,021,000	66.46	18,194,000	8.96	49,946,000	24.58
Philadelphia	116,117,000	72,707,000	62.61	12,966,000	11.17	30,444,000	26.22
Delaware	6,411,000	2,762,000	43.09	3,649,000	56.91	None Reported.	
Maryland	41,595,000	33,460,000	80.44	1,639,000	3.94	6,496,000	15.62
District of Columbia	5,368,000	4,211,000	78.45	1,157,000	21.55	None Repcrted.	
Eastern States	$960,592,000	$587,860,000	61.20	$192,583,000	20.05	$180,149,000	18.75

Virginia	$5,781,000	$699,000	12.09	$4,866,000	84.17	$216,000	3.74
West Virginia	3,655,000	477,000	13.06	2,850,000	77.97	328,000	8.97
North Carolina	324,000			Classes not Reported.			
South Carolina	222,000			Classes not Reported.			
Georgia	911,000			Classes not Reported.			
Florida	656,000			Classes not Reported.			
Alabama	774,000	194,000	25.00	580,000	75.00	None Reported.	
Mississippi	2,284,000	162,000	7.08	2,079,000	91.03	43,000	1.89
Louisiana	3,232,000	347,000	10.73	2,195,000	67.92	690,000	21.35
Texas	1,732,000			1,678,000	96.89	54,000	3.11
Arkansas	1,892,000			376,000	19.89	1,516,000	80.11
Kentucky	8,870,000	4,501,000	50.74	4,037,000	45.51	332,000	3.75
Tennessee	12,021,000	222,000	1.85	11,688,000	97.23	111,000	.92
Southern States	$42,354,000	$6,602,000	16.41	$30,349,000	75.47	$3,290,000	8.12
Ohio	$94,545,000	$2,789,000	2.95	$89,643,000	94.82	$2,113,000	2.95
Indiana	38,143,000	7,579,000	19.87	29,317,000	76.86	1,247,000	3.27
Illinois	42,794,000	12,787,000	29.88	25,360,000	59.26	4,647,000	10.86
Chicago	103,427,000	45,622,000	44.11	25,888,000	25.03	31,917,000	30.86
Michigan	37,261,000	8,645,000	23.20	27,547,000	73.93	1,069,000	2.87
Wisconsin	39,254,000	9,421,000	24.00	26,288,000	66.97	3,545,000	9.03
Minnesota	19,459,000	13,695,000	70.38	5,480,000	28.16	284,000	1.46
Iowa	7,856,000	3,515,000	44.75	3,822,000	48.65	519,000	6.60
Missouri	41,696,000	26,606,000	63.81	11,154,000	26.75	3,936,000	9.44
St. Louis	35,277,000	16,492,000	46.75	11,352,000	32.18	7,433,000	21.07
Middle Western States	$459,712,000	$147,151,000	32.01	$255,851,000	55.65	$56,710,000	12.34

TABLE B—*Continued.*

States	Total Estimated Bond Investment.	Railroad. Amount.	Railroad. Percentage.	Municipal. Amount	Municipal. Percentage.	Miscellaneous. Amount	Miscellaneous. Percentage.
		CLASS OF BONDS HELD					
North Dakota	$209,000			$174,000	83.33	$35,000	16.67
South Dakota	598,000	Classes not Reported.					
Nebraska	2,748,000			2,748,000	100.00		
Kansas	6,585,000	$904,000	13.73	5,656,000	85.89	25,000	.38
Montana	2,128,000			2,128,000	100.00		
Wyoming	133,000	Classes not Reported.					
Colorado	14,484,000			11,041,000	76.23	3,443,000	23.77
New Mexico	40,000	40,000	100.00				
Oklahoma	2,120,000			1,997,000	94.22	123,000	5.78
Indian Territory	166,000	Classes not Reported.					
Western States	$29,211,000	$944,000	3.33	$23,744,000	83.86	$3,626,000	12.81
Washington	$3,113,000	$2,802,000	90.00	$311,000	10.00		
Oregon	8,323,000	8,088,000	97.18	158,000	1.90	$77,000	.92
California	90,664,000	65,015,000	71.71	15,984,000	17.63	9,665,000	10.66
Idaho	498,000			437,000	87.72	61,000	12.28
Utah	3,417,000	272,000	7.95	2,867,000	83.92	278,000	8.13
Nevada	No Reports.						
Arizona	611,000	57,000	9.35	524,000	85.72	30,000	4.93
Pacific States	$106,626,000	$76,234,000	71.50	$20,281,000	19.02	$10,111,000	9.48
Total	$1,771,682,000	$913,051,000	51.62	$568,905,000	32.17	$286,716,000	16.21

at its fountain head. They like railroad bonds because they find these yield higher rates than municipals, and at the same time they are possibly as well equipped as any group of bankers in the Union to select, for their investments, railroad bonds that will net them market profits. The State of Connecticut has for years been the banner territory for the traveling bond salesman.

At first glance, the failure of the bankers of the State of Vermont to qualify with the bankers of the other New England States as buyers of railway bonds appears strange. Less than 2.25 per cent of the investment in that state is in railway bonds. The phenomenon is explained in large part by the fact that the savings bank and trust company laws of that state prohibit the investment of funds in bonds of railroads.

Vermont, therefore, naturally becomes one of the states which run to municipals. Considering the volume of holdings, as well as the ratio to total investments, the State of Ohio and the City of Boston appear to be the real leaders in municipal investments. The "old-line" bankers in both supplied a nucleus about which was built a large trade in standard municipal bonds. Boston, in particular, has many investment houses of wide clientele which do the bulk of their business in municipal bonds.

The State of Ohio, with over $89,000,000 in municipal bonds, owes its distinction as the leader of the list largely to the tax exemption of this class of bonds, coupled with the fact that the state is prolific in municipal issues of sterling character. Cincinnati is a busy center for municipal bond trading. Most of the municipalities of the state have reached that stage in development which calls for heavy expenditures on public works, and the banks find it profitable to invest in local securities of this kind.

The same tendency is noted in the Far West, though not to so great a degree on the Pacific coast. The banks buy municipal bonds as a bid for city business, and to assist in local development which accrues eventually to their own benefit. Localizing of investment is the popular excuse from the Western bankers for failure to purchase any great amount of railways bonds. Kansas, Oklahoma, Idaho, Utah and other states whose local resources are opening out incline to home investment rather than to the purchase of securities good in themselves, but without local influence.

This localization of investment is the basis of practically all

the buying of miscellaneous bonds by the banks. Boston and Chicago are notable in this respect, as are also Arkansas and Colorado. The latter state seems peculiarly averse to railway bonds. Nearly all its investments, not very heavy in the aggregate, are in local municipals and in miscellaneous bonds on local, particularly irrigation, enterprises. The investment of bank funds in miscellaneous bonds is not widespread, the total for the Union being 16.21 per cent of total bond holdings. This figure is probably lower than it was in 1902. The investment of bank funds in bonds of this kind was recognized as the most important single factor in the numerous bank troubles that arose during and after the long period of liquidation in all the markets of the United States.

Opinions as to Advisability of a Bond Reserve

The wisdom of keeping a second reserve in high-class bonds in addition to the ordinary cash reserve, has evidently received much thought among bankers. Their tabulated replies are given below. The larger percentages of approval, it will be seen, are in what we have termed the more fully developed sections.

TABLE C.

FAVORABLE TO A BOND RESERVE FOR BANKS.

Percentages from replies by banks expressing opinions.

	Yes.	No.
New England States	93	7
Eastern States	96	4
Southern States	81	19
Middle Western States	88	12
Western States	81	19
Pacific States	90	10
Average for United States	89	11

It is evident, then, that the bankers of the United States have gradually, in the last fifteen years, taken up the matter of carrying a bond reserve, and after careful consideration, a large majority have adopted it in the developed portions of the country, and have approved of it in those parts which have not yet reached the bond

zone. The practice is steadily extending and bonds are being absorbed in very large amounts annually.

On the subject of what bonds should be used for the secondary or safety reserve, the bankers have expressed themselves freely.

TABLE D.

CLASSES OF BONDS RECOMMENDED FOR BOND RESERVE.

Percentages from number of banks expressing opinion.

	High-class Listed R. R.	Municipal.	Public Utility and Industrial.[2]	U. S. Gov'nt.
New England States	54	27	9	10
Eastern States	65	22	7	6
Southern States	25	50	4	21
Middle Western States	27	55	4	14
Western States	24	45	11	20
Pacific States	29	35	15	21
	—	—	—	—
Average for United States	38	42	6	14

The opinion in favor of municipals for this purpose (highest in percentages in the South, Middle and Western States) is influenced by the same local conditions to which we have called attention in Table B, showing class of bonds held.

The New England and the Eastern States easily lead in the percentage of banks which pin their faith to the high-class listed railway bonds. The fact is traceable in part to accessibility to bond markets, which underlies the long-standing penchant of investors in those states for railway bonds. The Eastern investor demands a better return than he can get from government bonds; hence the low percentage of bankers in these states who recommend the government issues. The predilection of the Western bankers for local municipals is an outcome of the co-operative spirit that has made the West what it is to-day. The same principle governs the inclination of the Pacific coast bankers toward public utility and local industrial bonds.

Our correspondents were asked to express an opinion as to what proportion of deposits should be kept as a reserve in bonds. The results are herewith given in

[2]The proportion of industrial in this column, as shown by the replies, is in very small proportion to public utilities.

TABLE E.

PERCENTAGE OF DEPOSITS RECOMMENDED FOR BOND RESERVE.

Average from replies received.

New England States recommend	26
Eastern States recommend	29
Southern States recommend	18
Middle Western States recommend	19
Western States recommend	18
Pacific States recommend	22
Average for United States	22

The conservative and more highly developed sections again lead in proportion recommended, the Pacific States follow closely, and, as before, the South, Middle West and Western States stand lower. It will be noted that the average percentage of all replies is 22.

Dealing in Bonds

The taste for bonds as an investment for idle funds has not been confined to banks. Investors themselves, the real owners of the idle funds in banks, have found this to be a better disposition for a part of their balances than to leave them on deposit in banks at lower rates than bonds yield. Consequently there has grown up a demand for bonds in the communities where deposits have been increasing most. Some thrifty bankers have taken advantage of this demand, and seeing deposits being drawn out by the investor, for bond purchases, have established bond departments for the purpose of supplying their customers with such issues as they might desire, and buying from them, when, for any reason, they might wish to sell. In nearly every instance reported this has proven a satisfactory innovation. The bankers have been acute enough not to cultivate this taste in advance and so induce depositors to draw down their accounts. The process of evolution is shown by many expressions of opinion from communities where depositors are not yet familiar with bonds, indicating the attitude of the local bankers, who assert that the sale of bonds to customers would at once reduce deposits. It is only when the depositor has begun to buy bonds and

to draw funds for this purpose that the bankers, yielding to the inevitable, have turned the practice into a source of profit.

In the expressions of approval of the bond business many bankers are careful to state that they do not mean underwriting and floating a special single issue among customers, with a chance of unfavorable outcome and a consequent bad reputation for the bank. A number distinctly state that they confine themselves to the classes of bonds for which customers are looking, dealing only in such. One banker makes it a practice to buy back any issue he has offered, even should it decline in value.

That the practice of dealing in bonds is growing steadily, and especially in what we have termed the more highly developed sections, is shown by the following table, which gives percentages of opinions as to the expediency of banks dealing in bonds, affirmative and negative, also percentages of banks actually engaged in the bond business:

TABLE F.

DEALING IN BONDS.

Percentages from replies by banks reporting on this subject.

	Approve of Bond Business.		Engaged in Bond Business.	
	Yes.	No.	Yes.	No.
New England States	43	57	19	81
Eastern States	29	71	18	82
Southern States	39	61	11	89
Middle Western States	37	63	18	82
Western States	34	66	11	89
Pacific States	64	36	15	85
Average for United States	37	63	16	84

General Conclusions

The opinions and information furnished by our correspondents (in addition to statistics), revealing conditions pertaining to the bond question the country over have proven a most interesting result of this investigation. Some general conclusions may be drawn from the data thus obtained, supplemented by a previous knowledge of conditions.

Commercial Paper Compared With Bonds

It may be concluded with some confidence that commercial paper as an investment for bankers, distant from the financial centers, is undesirable. This does not apply to many bankers in the East, who are expert buyers of paper and rarely have a loss. These find that maturities, purchased with reference to fixed dates of payment, with no expectation of renewal, answer most advantageously the purpose of a reserve. It is in fact a reserve which, so to speak, converts *itself* into cash. For the banker who is not an expert, however, such purchase is most hazardous. To test the quality of outside commercial paper requires long experience, unremitting investigation, wide facilities for detecting signs of deterioration and never-ceasing, alert attention to the faintest sign of danger. To one who is not thus equipped the proportion of loss is large, and the testimony of our correspondents is mainly to the effect, that while paper yields a larger immediate return, the results over a period of years are largely in favor of bonds. The proportion of loss on paper (while there is practically none on well-selected bonds) is so considerable that the actual return on bonds is greater. The yield of bonds is calculated as about 1 per cent less than the nominal yield of commercial paper, but when the losses have been equated the difference is practically much more than wiped out.

The conditions on which the value of commercial paper (other than purely local paper) rests are very miscellaneous and constantly shifting. Bonds, on the other hand, show a very small percentage of defaults. Their maturities may be long deferred, but they are definite and certain. None of the bankers writing us has had occasion to refer to any lack of safety in bonds properly selected.

A very considerable number of our correspondents find that by the careful purchase of bonds when they are cheap a substantial appreciation in their value may be realized. Of course, prices of bonds are subject to numerous contingent conditions and a certain amount of experience is necessary to determine values with a fair degree of accuracy. In the earlier stages of bond investment the banker, if inexperienced, must depend in a measure upon some thoroughly reliable bond house through which to make his purchases and sales, and he may do this very safely. It is not necessary to become a speculative trader in order to realize a conserva-

tive profit on bond investment, which, added to the fixed rate of interest, produces a handsome yield.

Bonds as Reserve and for Investment

Bonds lend themselves to two distinct uses for bankers; as a reserve and as an investment. Nearly all experienced bankers recognize the value of bonds for temporary investment of idle funds. Many of our correspondents find them desirable for permanent employment of a considerable part of the bank's resources for revenue purposes. One or two banks report that they invest practically all their loanable funds in bonds.

In creating an added reserve of some sort, the consideration of the soundness of the security presents itself first; next convertibility—the question of income being subordinate to both of these. Where investment alone is considered, convertibility does not enter as a factor to so large an extent. Soundness and rate of income are then the two requisites, but for reserve purposes, as has been said, convertibility is the primal consideration, next to safety.

The high-grade municipal bond is generally conceded the first place for safety, because it rests upon the established credit of communities. The bonds of long-established railroads come next in favor because the conservatively operated large railroad has developed a credit not easily dissipated by a short period of indifferent management, and because transportation, by reason of its universal necessity, is a comparatively stable industry, and responds less sharply to changes in economic conditions than do enterprises less public in character. Good traction bonds and the best class of industrials are gradually growing in favor as investments, and some have already established themselves on a plane with standard railroad issues. Great care should, however, be exercised in the selection of such investments, and only well secured bonds, of thoroughly established enterprises, should be considered.

Convertibility for reserve purposes comprises not only the power to convert into cash, but also the ability to realize cash equivalent by loans upon which bonds are collateral. Loans of this character may be obtained at the lowest rates prevailing. Still another channel of convertibility has been opened in the last year or two by the decision of the Secretary of the Treasury to receive high-grade

bonds as security for government deposits in especially stringent crises.

In selecting bonds for the purpose of reserve, the broader the market the more perfectly is the purpose served. Hence, those listed on the principal exchanges and those with an international market, are preferable. The broader the market the greater is the facility for the purchase and sale of securities at close quotations.

As to Total Holdings

Reverting once more to the first table of the series (Table A), the total figures for all the states show that there are held by banks and trust companies in the United States (excluding private banks and mutual savings banks) the enormous sum of $1,771,000,000 in bonds, exclusive of governments. The sum is equal to about 17 per cent of the total deposits and is greater than the total capital of all the banks, being 124 per cent of the capital, or equal to the total amount of capital and a considerable portion of the surplus.

As nearly as can be ascertained, the main part of this vast sum has been absorbed by bonds since the panic year 1893.

Economic Effect of Large Investment in Bonds by Banks

The inflation of commercial credit beyond the ability of bank cash assets to support it, has brought about commercial collapse at nearly regularly recurring periods during the entire era of industrial progress in the United States. In times of plethora of money, banking judgment is easily warped by the disturbing reflection that funds are idle when they should be earning dividends. This attitude leads to the acceptance of doubtful investments which would be refused quickly if legitimate demand were active. In each period to which reference has been made the enthusiasm for expansion, excited by plentiful credit and preceded by real prosperity and an accumulation of wealth, has carried the banking operations beyond legitimate functions, into promotions of unwarranted enterprises, resulting eventually in widespread disaster.

The availability of high-grade bonds furnishes a field for the safe employment of surplus moneys during prosperous periods, thereby minimizing the temptation to participate in speculative or questionable schemes.

The economic effect of the reserve investment in bonds by banks will undoubtedly be to strengthen the foundations of credit in the United States. Not only are the funds in this great reserve rescued from the danger of unwise risks in the periods already referred to, of enthusiastic promotion following truly prosperous times, but, owing to their disposition in high-class convertible securities instead of in possibly uncollectible paper, an additional and always available means is provided for weathering financial storms.

This investment, then, means a curtailment of credit inflation, either averting for a longer period the recurrence of industrial panic or providing means of meeting and ameliorating that condition when it does actually develop.

Whether bond investment has been undertaken by the bankers of the United States to counteract these ever-recurring tendencies toward panic, or whether considerations of safety or of profit have determined the policy of each individual, the fact remains that the movement has progressed steadily with beneficial results. These benefits will continue and will increase, providing the bonds acquired are of the high character which is now the standard among able and conservative bank managers.